## Florida Department of Health

Enhanced Influenza Surveillance Guidance

Focus Area: Surveillance



# Enhanced Influenza Surveillance for Hospitals, Intensive Care Unit Cases

Version 3.0

September 2, 2019

Note: This document may become outdated as situations change. Documents on this topic dated after September 2, 2019, supersede this one. This document will be posted on the Bureau of Epidemiology website at FloridaHealth.gov/FloridaFlu.

#### **Summary:**

- Seasonal influenza activity patterns are unpredictable. Influenza seasons can vary
  dramatically in terms of timing, severity, and duration of the season. Maintaining a
  robust surveillance program to identify when and where influenza viruses are
  circulating and what populations are impacted is crucial to the Florida Department
  of Health.
- To assist in identifying any unusually severe presentations of influenza and assessing season severity, the Florida Department of Health is requesting hospitals report patients meeting all three of the following criteria to your county health department (CHD):
  - 1) Admitted to the intensive care unit (ICU)
  - 2) Laboratory-confirmed influenza (including rapid antigen tests)
  - 3) Less than 65 years of age
- Additionally, please review the Centers for Disease Control and Prevention (CDC) guidance document Prevention Strategies for Seasonal Influenza in Healthcare Settings: www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm

#### **Actions:**

- Report all persons admitted to the ICU with laboratory-confirmed influenza (including rapid antigen tests) who are less than 65 years of age and submit positive specimens to the Florida Department of Health Bureau of Public Health Laboratories (BPHL) for confirmation and additional testing.
  - Rapid influenza diagnostic tests can be used to identify influenza but have suboptimal sensitivity. A negative rapid test cannot rule out influenza. Negative tests may require further testing for influenza by PCR or viral culture.
- Please also notify the CHD of patients who (a) are part of influenza-like illness (ILI) outbreaks, (b) have unusual or severe ILI presentations with no underlying health conditions, (c) have repeat influenza infections, or (d) have infections that are highly suspected to be resistant to antiviral therapies.
- As a reminder, report outbreaks and cases of influenza-associated pediatric
  mortalities to your CHD, per Chapter 64D-3, Florida Administrative Code. Suspect
  novel influenza is also reportable: ILI without another known etiology and have 1)
  direct or indirect exposure to swine or live poultry or 2) travel to an area with ongoing
  transmission of avian influenza within the week prior to symptom onset.
  - o Definition of ILI: Fever >37.8°C (100°F) and a cough and/or sore throat
- Please contact your CHD to report cases: FloridaHealth.gov/CHDEpiContact.

#### Background:

The Florida Department of Health conducts surveillance to detect changes in the influenza virus, identify unusually severe presentations of influenza infection, detect outbreaks, and determine seasonal influenza trends in order to guide influenza prevention, particularly in high-risk populations (young children, adults aged 65 years and older, and pregnant women).

• For detailed influenza surveillance information, please see the *Florida Flu Review* at FloridaHealth.gov/FloridaFlu

#### **Antivirals:**

CDC recommends the use of antiviral treatment as soon as possible for all persons with suspected influenza who are hospitalized, severely ill, or at higher risk for complications (children under 2 years old, adults aged 65 years and older, pregnant women, and those with underlying medical conditions). Treatment should be administered within 48 hours of illness onset (but treatment administered after this period can still be beneficial).

- Clinicians should not wait for laboratory confirmation to administer antivirals for suspect influenza for people in high-risk groups.
- CDC Influenza Antiviral Medications: Summary for Clinicians: www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm

## **Collection and Submission of Specimens for Further Testing at BPHL:**

- Contact your CHD prior to submitting specimens to BPHL for testing.
- If available, please conduct influenza PCR testing prior to submitting specimens to BPHL.

## **Specimen Collection:**

- Original specimens are preferred when available.
- When influenza is detected in a clinical laboratory by rapid testing methods, please send
  an aliquot (1–2 ml) of the original swab eluate in viral transport medium (VTM). Place the
  swab eluate in VTM before sending to BPHL. BPHL is required by the U.S. Food and
  Drug Administration-approved PCR protocol to only test original specimens that are in
  VTM. Rapid test fluid can interfere with PCR. Do not send the rapid test reagent.
- If collecting a new specimen, collect nasopharyngeal (NP) specimens with a viral swab and place in VTM from those patients with laboratory confirmed influenza (including rapid antigen tests).
- NP swabs (not nose swabs) are preferred. There must be an adequate volume of the specimen, or the test will not be valid.
- If an NP swab is not available, these other respiratory specimens are also acceptable:
  - Nasopharyngeal aspirates
  - Bronchial wash
  - Sputum (not saliva)
  - Oropharyngeal (throat)
- Swabs must be placed in 2–3 ml of VTM immediately after collection.
- · Refrigerate immediately. Do not freeze.
- Collect specimens from patients within three days of illness onset.

## **Specimen Shipping:**

- Contact your CHD **prior to submitting** specimens to BPHL for testing. CHD contact information can be found at FloridaHealth.gov/CHDEpiContact.
- Keep specimens refrigerated at 4°C (not frozen) and ship on gel ice packs no later than 48 hours after collection.
- On the DH1847 specimen submission form (FloridaHealth.gov/programs-and-services/public-health-laboratories/forms-publications/\_documents/DH1847--rev-5-13.pdf), select test "9100 Influenza AB RT PCR" and add in the notes section "Flu A or B positive for confirmation." Indicate "swab eluate in VTM," if appropriate. Specify source of the swab.

VIROLOGY	
Circle Specimen Type(s): CSF Acute Serum Convalescent Serum Stool Swab Other (for swabs indicate specimen source, eg NP, throat, vulva, etc)	
151 167 Select specimen type and 1. Indicate flu A or B positive for confirmation 168 2. Indicate "swab eluate in VTM" (if appropriate) and 154 source	
1500 Dengue**  1710 Ehrlichia IgG IF A**  1800 Enterovirus Culture  1810 Enterovirus PCR*  0900 Herpes Simplex Culture  0800 Herpes Simplex Smear DF A  0836 Herpes Simplex Smear DFA Type 1/2  0838 Herpes Simplex Type 1/2 IgG  9100 Influenza AB RT-PCR  1610 Influenza Culture  1714 Lyme**	1830 Norovirus PCR 9500 Q Fever* 1620 Respiratory Virus Culture 1770 Respiratory Virus PCR* 1716 Rickettsia (RMSF) IgG** 1720 Rubella IgM* 1300 Toxoplasma IgG 1570 Varicella Zoster IgG 0920 Varicella Zoster PCR* 0910 Varicella Zoster Smear Other:

If you have any questions, please do not hesitate to call your CHD for information: FloridaHealth.gov/CHDEpiContact. If you are unable to reach your CHD, please contact the Bureau of Epidemiology at 850-245-4401.

#### **Prevention Strategies for Seasonal Influenza in Health Care Settings:**

Review and implement or enhance prevention strategies for seasonal influenza. For more information, see <a href="https://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm">www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm</a>.

#### 1. Promote and administer influenza vaccine:

Annual vaccination is the most important measure to prevent seasonal influenza infection. Achieving high influenza vaccination rates of health care personnel (HCP) and patients is a critical step in preventing health care transmission of influenza from HCP to patients and from patients to HCP. Please review vaccination rates among HCP and administer vaccine to HCP not yet vaccinated.

#### 2. Take steps to minimize potential exposures

Minimize influenza exposures before arrival, upon arrival, and throughout the duration of the visit to the health care setting, to be adhered to by everyone—patients, visitors, and HCP. Measures include screening and triage of symptomatic patients (including when scheduling appointments), use of face masks, and implementation of respiratory hygiene and cough etiquette.

#### 3. Monitor and Manage III Health Care Personnel

HCP who develop fever and respiratory symptoms should be:

- Instructed not to report to work, or, if at work, to stop patient-care activities, don a
  face mask, and promptly notify their supervisor and infection control
  personnel/occupational health before leaving work.
- Excluded from work until at least 24 hours after they no longer have a fever (without the use of fever-reducing medicines such as acetaminophen).

### 4. Adhere to Droplet Precautions

Droplet precautions should be implemented for patients with suspected or confirmed influenza for seven days after illness onset or until 24 hours after the resolution of fever and respiratory symptoms, whichever is longer, while a patient is in a health care facility.

## 5. Use Caution When Performing Aerosol-Generating Procedures

Some procedures performed on patients with suspected or confirmed influenza infection may be more likely to generate higher concentrations of infectious respiratory aerosols than coughing, sneezing, talking, or breathing. Ideally, a combination of measures should be used to reduce exposures from these aerosol-generating procedures when performed on patients with suspected or confirmed influenza.

#### 6. Manage Visitor Access and Movement Within the Facility

Limit visitors for patients in isolation for influenza to persons who are necessary for the patient's emotional well-being and care.

## 7. Monitor Influenza Activity

Establish mechanisms and policies by which HCP are promptly alerted about increased influenza activity in the community or if an outbreak occurs within the facility. Establish close communication and collaboration with your CHD.

#### 8. Implement Environmental Infection Control

Detailed information on environmental cleaning in health care settings can be found in CDC's Guidelines for Environmental Infection Control in Health-Care Facilities (www.cdc.gov/infectioncontrol/pdf/guidelines/environmental-guidelines-P.pdf) and Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (see section IV.F. Care of the environment) (www.cdc.gov/infectioncontrol/guidelines/isolation/index.html).

#### 9. Implement Engineering Controls

Consider designing and installing engineering controls to reduce or eliminate exposures by shielding HCP and other patients from infected individuals. Examples of engineering controls include installing physical barriers such as partitions or curtains in triage areas.

#### 10. Train and Educate Health Care Personnel

Ensure that all HCP receive job- or task-specific education and training on preventing transmission of infectious agents, including influenza, associated with health care during orientation to health care settings.